

## Bibliographic Fields

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**Inventor(s):**

**Applicant(s):**

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**Priority number(s):** JP19730045102 19730423

## 明細書

### 1. 発明の名称

容器等に対する軟質筒状体の挿入方法。

## Claims

### 2. 特許請求の範囲

(1)

内端部が求心方向を向く複数の弾性片を備える弾性求心案内体の内部へ容器類を貫通させることにより、この容器類をもって、上記弾性片の内端部を押し広げるとともに、弾性片の外部をもって、軟質筒状体の開口端を押し広げさせ、この状態で、前記容器類を、弾性片の内面を滑らせつつ、軟質筒状体の所要の位置まで挿入させ、しかる後、上記弾性求心案内体を容器類と軟質筒状体との間から抜き外すことを特徴とする容器等に対する軟質筒状体の挿入方法。

(2)

弾性求心案内体における弾性片の内端部を、該案内体の軸線方向に側位させておき、かつこの弾性片の外面に、軟質筒状体の開口端を予め挿入しておくことを特徴とする特許請求の範囲第(1)項に記載の方法。

## Specification

### 3. 発明の詳細な説明

かん、びんその他の容器等に、熱収縮性合成樹脂製の筒状のシール体もしくはラベル等を挿入した後、これを加熱収縮して容器の外面に密着させると、体裁良好であるとともに汚れを防止し、かつ容器の保護もしくは封\*をも兼ね、しか

## Specification

### 1. Title of Invention

intercalation method . of flexible cylinder for canister etc

### 2. Claims

(1)

As internal end portion of above-mentioned elastic piece is expanded internal end portion center seeking direction by penetrating canister to interior of elasticity center seeking guide which has elastic piece of plural which directs, with this canister , with outside of elastic piece , open end of flexible cylinder expanding, While with this state , aforementioned canister , making interior surface of the elastic piece slide, inserting to necessary position of flexible cylinder , intercalation method . of flexible cylinder canister etc which designates that after that, canister and pulls out above-mentioned elasticity center seeking guide from between flexible cylinder and removes as feature for

(2)

method . which is stated in Claims Claim (1) which designates that side rankpoints to internal end portion of elastic piece in elasticity center seeking guide , to axial direction of the said guide , at same time in exterior surface of this elastic piece , beforehand inserts open end of flexible cylinder as feature

### 3. Detailed Description of Invention

In can and bottle other canister etc, after inserting seal body or label etc of tubular of heat shrink synthetic resin , heating and contraction doing this, when sticks to exterior surface of canister , it is appearance satisfactory and also to prevent soiling, at same time protection or seal of canister \* to

も材料費は軽少で済むので、きわめて効果的かつ実用的である。

しかし、このような包装手段における難点は、シール体もしくはラベル等、軟質の筒状体を容器に的確に挿入することが困難であることであり、このような困難は、容器が鍔縁その他の突起を有する場合に、特に増大する。

本発明は、例え突起を有する容器、もしくは大小寸法を異にする容器であっても、きわめて簡単な手段により、軟質筒状体を、その外面所望の位置へ、正確かつ能率的に挿入する方法に関するもので、以下、筒状かん体に熱収縮性合成樹脂フィルムよりなるシール体兼用の筒状ラベルを挿入する場合を例示する図面を参照しつつ説明する。本発明の実施に当っては、弾性求心案内体を使用されるが、まずこれについて説明する。

この案内体は、第 1 図に示す平面図、及び第 3 図に示す縦断正面図により分るように、取付環(1)に、複数本の先端部(2)が軸線方向に傾斜し、かつ求心方向を向く帯状弾性片(3)・・・の基部を、止めねじ(4)で止着して構成されている。しかして、帯状弾性片(3)・・・の先端部(2)・・・の外径は、使用するべき筒状ラベルの内径よりも小さく、また同じく内径は、筒状かん体の先端部の外径よりも小さくしてある。

なおこの案内体は、第 3 図に示すように、薄肉の金属もしくは硬質の合成樹脂等よりなる弾性円板の中心孔(6)より、放射状をなす等間隔の複数の切込み(7)を、弾性円板(5)の周縁との間に若干の余地を残すようにして設けて構成してもよい。まず第 4 図に示すように、扁平に折り重ねた筒状ラベル(11)の両側面ほぼ中央部を、真空カップ(12)(12)で吸着し、第 5 図に示すように真空カップ(12)(12)を側方へ移動させて、筒状ラベル(11)を開口させる。ついで、第 6 図に示すように、筒状ラベル(11)の一端を、第 1, 2 図に示す弾性求心案内体における帯状弾性片(3)・・・の先端部(2)・・・へ挿入係止する。

しかる後、第 7 図に示すように、弾性案内体の取付環(1)の内部を経て、筒状かん体(13)を帯状弾性片(3)・・・の内部へ押し込み、第 8 図に示すように、帯状弾性片(3)・・・を介して開かれた筒状ラベル(11)の要所へ位置させる。

しかる後、弾性案内体を第 9 図に示すように軸線方向へ抜き去るとともに、真空カップ(12)(12)を釈放すれば、筒状ラベル(11)は、扁平にな

combine, furthermore because material consumption light may belittle, It is quite effective and a practical .

But, difficulty in package means a this way, when canister collar possesses edge other protrusion , especially increases, cylinder of the flexible by fact that is difficult to insert in canister precisely,difficulty such as seal body a this way or label .

Even with container which differs canister , or large and small dimension which compare this invention and, possess protrusion , flexible cylinder , to the exterior surface desired position , being something regarding method which can insert in theaccuracy and efficient with quite simple means , below, While referring to drawing which illustrates case where the tubular label of seal body combined use which consists of heat shrink synthetic resin film in tubular can body is inserted explain. At time of execution of this invention , elasticity center seeking guide is used, butexplain first concerning this.

As understood due to top view , which is shown in Figure 1 and the vertical front planar view which is shown in Figure 3 , install and this guide , in ring (1),multiple tip portion (2) inclines to axial direction , at same time strip elastic piece whichdirects (3) \* \* \* afixing doing base , with set screw (4), configuration has been done center seeking direction. Therefore, strip elastic piece (3)... tip portion (2) \* \* \* as for outer diameter , incomparison with inner diameter of tubular label which should use it is madesmall, in addition similarly as for inner diameter , small in comparisonwith outer diameter of tip portion of tubular can body.

Furthermore this guide , as shown in Figure 3 , configuration may do the center hole of elasticity disk which consists of metal or hard synthetic resin etc of the thin film (6) from, in order to leave somewhat margin between surrounding edge of elasticity disk (5), providing cut (7) of plural of equal spacing which forms the radial . First as shown in Figure 4 , snap to flat and both side surfaces of tubular label (11) which is repeated central portion , adsorb almost with vacuum cup (12) (12), as shown in Figure 5 , moving vacuum cup (12) (12) to side direction , aperture you do tubular label (11). Next, as shown in Figure 6 , strip elastic piece in elasticity center seeking guide which shows the one end of tubular label (11), in first ,2 figure (3) \* \* \* tip portion (2)... toinserts stops.

After that, as shown in Figure 7 , passing by interior of installation ring (1) of elasticity guide , as tubular can body (13) strip elastic piece (3)... to interior shown in pushing in and Figure 8 , strip elastic piece (3)...through, tubular which was opened [ra ] \* position it does toimportant point of jp11 (11).

After that, as shown elasticity guide in Figure 9 , as pulls out to axial direction and goes away, if vacuum cup (12) (12) is released, tubular label (11) important point of can body (13)

ろうとするそれ自身の弾性復帰力により、かん体(13)の要所係止したままに残る。

この筒状ラベル(11)を適宜加熱収縮して、かん体(13)の外面に密着させれば、第 10 図に示すように、筒状ラベル(11)の施されたかん体(13)が得られる。なお、筒状ラベル(11)、弾性案内体及びかん体(13)のいずれを軸線方向に移動させて実施するかは任意である。

第 8 図に示した弾性案内体を使用する場合には、上記第 6 図示の過程において、弾性案内体を筒状ラベル(11)の開口端に接近させておくだけでよい。かくして本発明によれば、容器類は弾性片(3)・・・の内部を滑って円滑に挿入され、かつ軟質筒状体における容器類挿入側の開口端は、容器類の進入に応じて、弾性片により自動的に開かれる。で、容器類の形状や寸度に相当の不同があってもこれに軟質筒状体を、簡単、迅速かつ的確に挿入しうるのである。

## Drawings

### 4. 図面の簡単な説明

第 1 図は本発明の実施に際して使用される弾性求心案内体の一例の正面図、第 2 図は第 1 図における A-A 線縦断面図、第 3 図は弾性求心案内体の異なる例を示す平面図、第 4 図以降は、第 1, 2 図に示した案内体を使用して、本発明方法を実施する状態を工程順に略示する横断平面図である。

- (1) 取付環
- (2) 先端部
- (3) 帯状弾性片
- (5) 弾性円板
- (7) 切込み
- (11) 筒状ラベル
- (12) 真空カップ

remains while is stopped with elastic recovering force of that itself which is about to become flat .

As needed heating and contraction doing this tubular label (11), if sticks to exterior surface of can body (13), as shown in Figure 10 , can body (13) where tubular label (11) is administered is acquired. Furthermore, tubular label (11), moving which of elasticity guide and can body (13) to axial direction , whether executes, it is a option .

When elasticity guide which is shown in Figure 8 is used, making elasticity guide open end of tubular label (11) \*\*in above-mentioned Figure 6 Shimesu process , shatter is possible to be. According to this invention this way, canister sliding, elastic piece (3) \* \* \* interior is inserted smoothly, open end of canister insertion side at sametime in flexible cylinder is opened in automatic according to penetration of canister , by elastic piece . So, there being a difference which is suitable to configuration and the dimension of canister , in this flexible cylinder , can insert simply, quickly and precisely.

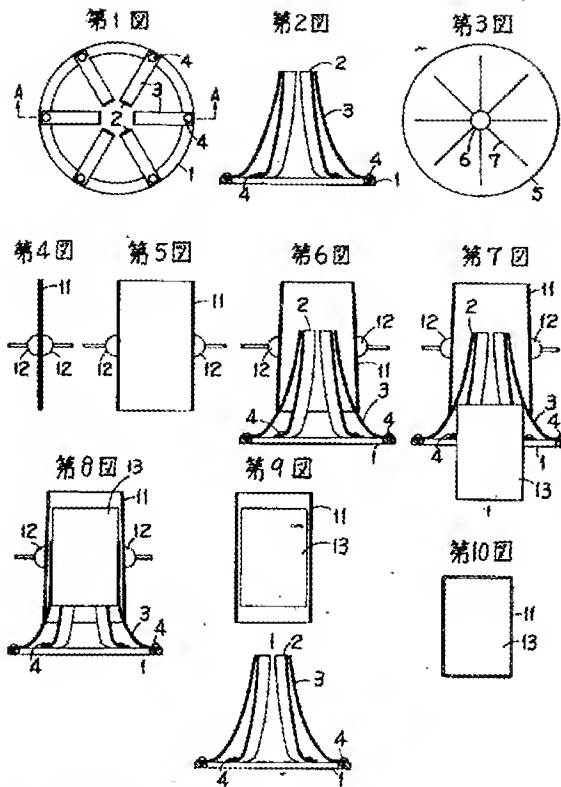
### 4. brief description of the drawings

As for Figure 1 as for front view , Figure 2 of one example of elasticity center seeking guide which is used at time of execution of this invention as for line A-A longitudinal cross-sectional view , Figure 3 in the Figure 1 after of top view , Figure 4 which shows different example of elasticity center seeking guide using guide which is shown in first , 2 figure, state which executes this invention method abbreviation is intersection top view which is shown in process sequence .

- (1) Installation ring
- (2) tip portion
- (3) strip elastic piece
- (5) elasticity disk
- (7) cut
- (11) tubular label
- (12) vacuum cup

(13)

かん体



手続補正書(方式)

昭和 48 年 11 月 28 日

特許庁長官 斎藤英雄殿

1.

事件の表示

昭和 48 年許許願第 45183 号

2.

発明の名称

容器等に対する軟質筒状体の挿入方法

3.

補正をする者

事件との関係

特許出願人

氏名 富士シール工業株式会社

4.

代理人

(13)

Can body

filing amendment (system )

1973 November 28 days

Japan Patent Office Commissioner Saito Hideo

1.

Indication of incident

1973 permission permission prayer 4 th 5183 numbers

2.

Title of Invention

intercalation method of flexible cylinder for canister etc

3.

Person who does correction

Something with related to incident

patent applicant

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4.

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5.

5.

補正

correction

命令の日付 昭和48年10月6日(発送日 昭和48年10月30日}

transmittal date 1973 October 30 days } date 1973 October 6 day of command

6.

6.

補正により増加する発明の数

Number of Inventions which increases with correction

7.

7.

補正の対象

object of correction

明細書

Specification

8. 補正の内容

content of 8.correction

第5頁第14行中「第4図以降は、」を「第4図乃至第10図は、」と訂正する。

"After Figure 4 , " in 5 th page 14th lines is corrected "As for Figure 4 to Figure 10 , " with.

(以上)

(Above)